DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014805 Address: 333 Burma Road **Date Inspected:** 03-Jun-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes N/A **Delayed / Cancelled:** No

Bridge No: 34-0006 **Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as 7BE X8E to edge plate. The weld designations reviewed are as follows:

7BE

- 1. SEG036E-074, 097, 119, 155, 164
- 2. SEG036E-042, 065, 119,173

9AE+9BE

Shield Metal Arc Welding (SMAW) repair welding was performed on weld joint 003 located at OBE9B bottom plate weld splice of segment. Welder is identified as Mr. Dai Lu (048659). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR1592.

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Y Location of repairs areas by above noted welder (048659) is located at 7070 and 7895mm.

9AW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 012 located at SEG049A cross beam side segment. Welder is identified as Mr. Zhao Aifei (067942). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

9BW

Shield Metal Arc Welding (SMAW) welding was performed on weld joint 045 located at SEG051A cross beam side segment. Welder is identified as Mr. Zhao Aifei (067942). ZPMC QC is identified as Li Yang. The welding variables monitored and recorded by the QC appeared to comply with WPS-B-P-2214-B-U2-FCM-1.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle Testing (MT) Technician performed MT on various locations in the trial assembly yard. Locations and indications are as followed:

9AE+9BE

- 1. Deck plate weld splice OBE9B-007 UT reject excavation areas at Y Locations 590, 1000 and 1280 on the cross beam side of segment.
- 2. Deck plate weld splice OBE9-0008 UT reject excavation areas at Y Locations 4690 and 4230 on the cross beam side of segment.

CB8

This QA Inspector observed ZPMC welder Du Henghua (067609) repair welding in the 4G position on FB202A (SPCM plate) weld joint FB202A-001-018 and FB201 weld joint FB202A-001-018. This QA Inspector asked for welder's qualification card to verify position qualified. QA Inspector noted welder was qualified in the 3G position and not the 4G position. (Welding out of position) This QA Inspector issued an incident report for noted issue.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (150-0042-2372), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer